

# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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# **Project Summary**

Federally Enforceable State Operating Permit (FESOP)
Allstate Insurance Company
Northbrook, Illinois

Site Identification No.:031207AEG

Application No.: 09070039

## Schedule

Public Comment Period Begins: November 6, 2014 Public Comment Period Closes: December 6, 2014

**Illinois EPA Contacts** 

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### I. <u>INTRODUCTION</u>

An application has been voluntarily submitted by Allstate Insurance Company for their Network Data Center in order to voluntarily incorporate federally enforceable limits. These limits would prevent the above facility from being a major source of emissions so that an operating permit does not have to be obtained under the Clean Air Act Permit Program. The proposed limits would be accompanied by recordkeeping requirements to assure that the plant is operated as a non-major source. Unlike the site's current operating permit(s), these conditions would be enforceable by both the State of Illinois and USEPA.

## II. SOURCE DESCRIPTION

Allstate Insurance Company is a property and casualty insurer headquartered in Northbrook, Illinois. Allstate Insurance Company operates a network-neutral data center used for operation only during periods of electrical power disruption to ensure the computer electronic records are maintained during electrical power outages. The emission units operated at the facility are

Four (4) 1,500 kW (2,250 engine HP) diesel-powered emergency generator sets (B Building Generator, D Building Generator, South Plaza Generator 4, and South Plaza Generator 5);

Three (3) 1,750 kW (2,606 engine HP) diesel-powered emergency generator sets (South Plaza Generator 6, South Plaza Generator 7 and South Plaza Generator 8); and Two (2) 2,500 kW (3,673 engine HP) diesel-powered emergency generator sets (DG1 & DG2)

The principal air contaminant of concern is Nitrogen Oxides (NO<sub>x</sub>) which is created by the combustion in the generators.

### III. GENERAL DISCUSSION

Federally Enforceable State Operating Permits (FESOPs) are federally enforceable, that is, the terms and conditions of the permits can be enforced by USEPA under federal law, as well as by Illinois government and the public under state law. These permits can establish federally enforceable limitations on the operation and emissions of a source that restrict the potential emissions of the source.

The source will be operating this plant under a FESOP because the actual emissions of the plant are below the levels at which the plant would be considered a major source under Title V of the federal Clean Air Act. However, in the absence of federally enforceable limitations, the plant's potential emissions would be such that the plant would be considered a major source. The permit acts to restrict the plant potential emissions so that it need not be considered a major source. As a result, the source does not need to obtain a

Clean Air Act Permit Program (CAAPP) permit for the plant, as would otherwise be required.

The FESOP limits the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for  $NO_x$  and CO.

#### IV. APPLICABLE EMISSION STANDARDS

All emission units in Illinois must comply with state emission standards adopted by the Illinois Pollution Control Board. These emission standards represent the basic requirements for sources in Illinois. The specific standards for this company are New Source Performance Standards (NSPS) for Stationary compression Ignition Internal Combustion Engines, 40 CFR 60 Subparts IIII and National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63 Subparts ZZZZ. These regulations limit the NO<sub>x</sub>, CO, VOM, PM and SO<sub>2</sub> emitted from the fuel combustion units. This source has emission limits in its permit that keep the amount of hazardous air pollutants below major levels. The application shows that the plant is in compliance with applicable state and federal emission standards.

All emission units in Illinois must comply with state emission standards adopted by the Illinois Pollution Control Board. These emission standards represent the basic requirements for sources in Illinois. The board has standards for sources of Nitrogen Oxides (NO<sub>x</sub>). The application shows that the plant is in compliance with applicable state (AND FEDERAL) emission standards.

The principal air contaminant of concern is Nitrogen Oxides  $(NO_x)$  which is created by the combustion in the generators. The facility has limited their throughput that will keep the  $NO_x$  emissions below the major source threshold level of 100 tons per year for  $NO_x$ .

## V. <u>CONTENTS OF THE PERMIT</u>

This permit that the Illinois EPA is proposing to issue will identify the specific emission standards that apply to the emission units at the plant. The conditions of this permit are intended to ensure that the source continues to comply with applicable emission standards.

The permit would also contain limitations and requirements to assure that this data center is operated as a non-major source. The permit would limit the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons per year for NO<sub>x</sub>. (Annual emissions of other pollutants from the plant are well below the 100 tons major source threshold.)

The permit sets limitations on the computer server facility emissions. These limitations are consistent with the historical operation and capacity of the facility.

The permit conditions require appropriate compliance procedures, including inspection practices as well as recordkeeping and reporting requirements. The source must carry out these procedures on an on-going basis to demonstrate that the plant is being operated within the limitations set by the permit and the plant's emissions are being properly controlled.

#### VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the source has met the requirements for issuance of its permit. The Illinois EPA is therefore proposing to issue the permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.